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ALKHATIB et al.(10) **Pub. No.: US 2014/0196121 A1**(43) **Pub. Date: Jul. 10, 2014**(54) **FEDERATION AMONG SERVICES FOR
SUPPORTING VIRTUAL-NETWORK
OVERLAYS****Publication Classification**(51) **Int. Cl.**
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REDMOND, WA (US)(21) Appl. No.: **14/202,966**(22) Filed: **Mar. 10, 2014****Related U.S. Application Data**(63) Continuation of application No. 12/823,891, filed on
Jun. 25, 2010, now Pat. No. 8,688,994.(57) **ABSTRACT**

Computerized methods, systems, and computer-readable media for promoting cooperation between a first and second virtual network overlay (“overlay”) are provided. The first overlay is governed by a first authority domain and includes members assigned virtual IP addresses from a first address range. The second overlay is governed by a second authority domain, which is associated with a second federation mechanism, for negotiating on behalf of the second overlay. The second federation mechanism is capable of negotiating with, or soliciting delegation of authority from, a first federation mechanism that is associated with the first authority domain. When negotiations are successful or authority is delegated, the second federation mechanism establishes a communication link between the second overlay and the first overlay or joins a member of the second overlay to the first overlay. Joining involves allocating a guest IP address from the first address range to the member.

